

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Petition for Waiver of Rules Requiring)	GN Docket No. 15-178
Support of TTY Technology)	

**October 6, 2017
IP-Voice Accessibility Status Report of AT&T**

Pursuant to Federal Communications Commission (“Commission”) Order released October 6, 2015,¹ AT&T submits this semi-annual report of its progress toward the development of IP-based accessibility solutions for voice communications and the status of the availability of those solutions. AT&T is notifying customers in bill messages, on its website, and by other effective means about how to access this report.

1. Progress and Status of Accessibility Efforts. AT&T continues its efforts to develop RFC 4103-based real-time-text (“RTT”) to deliver access to IP-based networks to persons with disabilities. AT&T continues to target end-of-year (“EOY”) 2017 for an application (“apps”) based over-the-top (“OTT”) RTT solution and EOY 2018 for a mobile device integrated RTT solution. These target dates continue to be dependent on mobile device manufacturer development cycles and success resolving software and other challenges that arise. Industry standards for RTT have been set by the Alliance for Telecommunications Industry Solutions (“ATIS”)² and AT&T’s RTT development has been and will continue to be guided by those standards.

¹ Petition for Waiver of Rules Requiring Support of TTY Technology, *Order*, GN Docket No. 15-178, 30 FCC Rcd 10855 (2015).

² The ATIS standards are RTT Mobile Device Behavior [MDB] Specification and RTT E2E (end-to-end) Service Description.

Since the April 2017 Status Report, AT&T has received from its vendors and tested multiple iterations of the OTT RTT apps for Android, iOS, and Windows devices, along with software upgrades needed to support these OTT RTT apps. Development of the OTT RTT app for Windows has been cancelled because Windows devices do not support AT&T Wi-Fi calling, all voice services on Windows devices can access TTY, Windows devices comprise less than .3% of the mobile devices on AT&T's network, and Windows devices are no longer manufactured.

AT&T continues production testing on the RTT OTT apps releases until all functions “pass,” including for AT&T, Cricket, and reseller versions of the apps. Production testing includes an analysis of backward compatibility functions, RTT-to-RTT calls, authentication, IP Multimedia subsystem (IMS) registration, integrated dialer capabilities, administrative processing and rating of RTT sessions, and other network configurations.

AT&T recently completed external friendly-user testing of the OTT RTT solution, including by persons with disabilities, and received valuable feedback to create a better user experience for AT&T subscribers. AT&T is currently engaged in first field application (FFA) testing in three (3) markets in the United States and is updating its network elements for a nationwide rollout of RTT service. In addition to FFA testing, AT&T employees in different areas of the country, including persons with disabilities, are testing the OTT RTT apps on real-world networks and in real-world environments on a day-to-day basis and will report any issues they experience that are not already being addressed by the FFA testing team. AT&T expects to meet the end-of-year 2017 deadline to provide OTT RTT apps across Android and iOS operating systems.

2. Interoperability. AT&T is working with two Tier-1 wireless carriers on the development of RTT to RTT interoperability across networks. Test cases have been defined and

agreed to, call flows have been shared, and lab-to-lab testing between carriers is underway. Wireless carriers are in various stages of technology development. RTT to RTT interoperability is expected to be functional by year end 2017 with those Tier-1 wireless carriers with which IP-interoperability deployments have commenced.

3. Backward Compatibility. AT&T's virtual RTT-TTY interworking gateway, which will deliver the backward compatibility function and allow RTT users to communicate with TTY users, such as E911 emergency services, 711 relay services, and accessible businesses, is operational in the production network. AT&T continues to expect complete functionality of this gateway when the OTT RTT app is introduced in 2017.

4. 911 Call Delivery. AT&T's RTT-TTY interworking gateway will allow AT&T to deliver 911 messages in TTY mode to PSAPs when sent via the OTT RTT apps. This functionality has completed lab testing and is currently in production testing. AT&T has also recently tested 911 call delivery using the RTT OTT apps with Tarrant County EMS. Issues were identified during this testing, root causes for those issues were identified, and resolution of those issues is progressing. Another round of tests with Tarrant County EMS is anticipated. In the future, AT&T will work with any PSAP that makes a "valid PSAP request" for AT&T to deliver RTT calls without conversion to TTY. Generally, the OTT RTT apps will deliver the 911 call over the best available and accessible network (e.g. Wi-Fi, LTE).

5. Estimated Timeline: AT&T still expects to launch OTT RTT apps no later than year end 2017 and a device integrated RTT solution by year end 2018. These timelines could be impacted by unexpected delays, manufacturer development cycles, and unexpected impacts from operating system changes.

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Respectfully submitted,



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